

1 **CLAIMS:**

2 Having thus described our invention, what we claim as
3 new and desire to secure by Letters Patent is as
4 follows:

5 1. A method for a user to interact with at least one
6 remote service, comprising:

7 said user connecting to a serving entity using a client
8 device attached to a wireless, circuit-switched, voice
9 telephony network;

10 obtaining and viewing a list of accessible remote
11 services from said serving entity;

12 selecting said at least one remote service from said
13 list; and

14 accessing and viewing said at least one remote service
15 in obtaining desired results.

16 2. A method as recited in claim 1, wherein the client
17 device is portable.

18 3. A method as recited in claim 1, wherein the client
19 device is a cellular telephone.

20 4. A method as recited in claim 1, wherein the step of
21 connecting includes dialing-up directly to the serving
22 entity.

1 5. A method as recited in claim 1, wherein the step of
2 viewing is performed employing a viewing device
3 collocated with said client device.

4 6. A method as recited in claim 1, wherein the viewing
5 device depicts information in a form including at least
6 one of: text, graphics, images, light display, or any
7 combination of these.

8 7. A method as recited in claim 1, wherein the step of
9 selecting includes employing a menu.

10 8. A method as recited in claim 5, wherein the step of
11 viewing is performed employing a web-browser and the
12 serving entity is a web-server.

13 9. A method as recited in claim 1, wherein the step of
14 connecting includes dialing-up to the serving entity
15 through a data network to which the serving entity is
16 connected.

17 10. A method as recited in claim 9, wherein the data
18 network is the Intranet controlled by an Internet
19 Service Provider.

20 11. A method as recited in claim 9, wherein the data
21 network uses the TCP/IP protocol suite for transporting
22 information.

23 12. A method as recited in claim 1, further comprising
24 said serving entity employing attributes of said
25 circuit switch network in authenticating said user.

1 13. A method as recited in claim 12, wherein said
2 attributes include a telephone number of said client
3 device.

4 14. A method as recited in claim 12, wherein said
5 attributes include a telephone number of said serving
6 entity.

7 15. A method as recited in claim 1, further comprising
8 establishing credentials so that said at least one
9 remote service can be manipulated in a secure manner on
10 the serving entity.

11 16. A method as recited in claim 1, wherein the step
12 of viewing views the list on a viewing device in a
13 manner that depends on the user's access privileges to
14 said at least one remote service.

15 17. A method as recited in claim 1, further comprising
16 the serving entity providing access to at least one
17 service agent used to access and control said at least
18 one remote service.

19 18. A method as recited in claim 17, wherein at least
20 one of said at least one service agent is a computer
21 software module executable on a computer.

22 19. A method as recited in claim 18, further comprising
23 activating said software module prior to invoking a
24 particular remote service.

1 20. A method as recited in claim 18, further comprising
2 activating said software module on demand after a
3 particular remote service has been invoked.

4 21. A method as recited in claim 18, further comprising
5 storing said software module at a data repository.

6 22. A method as recited in claim 21, further comprising
7 dynamically retrieving and activating said software
8 module from the data repository after invoking a
9 particular remote service.

10 23. A method as recited in claim 1, wherein said
11 wireless, circuit-switched, voice telephony network is
12 a first generation, analog, cellular network.

13 24. A method as recited in claim 1, wherein said
14 wireless, circuit-switched, voice telephony network is
15 a second generation, digital, cellular network.

16 25. A method as recited in claim 4, wherein the step of
17 dialing-up directly to the service entity further
18 includes passing dialing signaling and control data to
19 the serving entity through an intermediary data
20 network.

21 26. A method as recited in claim 9, wherein the step of
22 dialing-up to the serving entity through a data
23 network, further includes dialing-up to the serving
24 entity through a sequence of at least one data network,
25 the last one of which the serving entity is attached
26 to.

1 27. An article of manufacture comprising a computer
2 usable medium having computer readable program code
3 means embodied therein for causing a user to interact
4 with at least one remote service, the computer readable
5 program code means in said article of manufacture
6 comprising computer readable program code means for
7 causing a computer to effect the steps of claim 1.

8 28. A program storage device readable by machine,
9 tangibly embodying a program of instructions executable
10 by the machine to perform method steps for causing a
11 user to interact with at least one remote service, said
12 method steps comprising the steps of claim 1.

13 29. An apparatus for a user to interact with at least
14 one remote service, comprising:

15 user connecting means for said user connecting to a
16 serving entity using a client device attached to a
17 wireless, circuit-switched, voice telephony network;

18 user viewing means for obtaining and viewing a list of
19 accessible remote services from said serving entity;

20 user selecting means for selecting said at least one
21 remote service from said list; and

22 user access means for accessing and viewing said at
23 least one remote service in obtaining desired results.

1 30. A computer program product comprising a computer
2 usable medium having computer readable program code
3 means embodied therein for causing a user to interact
4 with at least one remote service, the computer readable
5 program code means in said computer program product
6 comprising computer readable program code means for
7 causing a computer to effect the functions of claim 28.
8

9 31. An apparatus for a user using a client device
10 attached to a wireless, circuit-switched, voice
11 telephony network, to interact with at least one
12 service, said apparatus comprising:

13 a telephone modem to receive an incoming call from a
14 client device, and also to receive and transmit data
15 over a telephone network, said telephone modem having a
16 client port through which the apparatus attaches to the
17 telephone network;

18 a dial-in service module to implement dial-in logic for
19 the client device; and

20 a protocol transport module to implement protocols
21 needed to transport data back and forth between a
22 browser application in the client device and a browser
23 server.

24 32. An apparatus as recited in claim 31, wherein said
25 browser server is used to obtain, organize, and
26 manipulate data received from and data sent to the
27 client device through the protocol transport module.

1 33. An apparatus as recited in claim 32, wherein said
2 data sent to the client device are displayed and viewed
3 by the browser application in the client device.

4 33. An apparatus as recited in claim 32, wherein said
5 data sent includes a list of services that are
6 accessible by the client device.

7 34. An apparatus as recited in claim 31, wherein said
8 data received by the browser application in the client
9 device include a selection of at least one service the
10 user of the client device controls and an action to be
11 taken for a selected service, and upon receipt of the
12 action the browser server interacts with a particular
13 service agent to implement the control logic for
14 controlling the selected service, wherein a control
15 signal generated by the service agent exits the
16 apparatus through the client port.

17 35. An apparatus as recited in claim 31, wherein said
18 dial-in server module triggers at least one particular
19 module in the apparatus to process any incoming calls
20 and requests from a client device.

21 36. An apparatus as recited in claim 31, wherein said
22 dial-in server module performs user authentication.